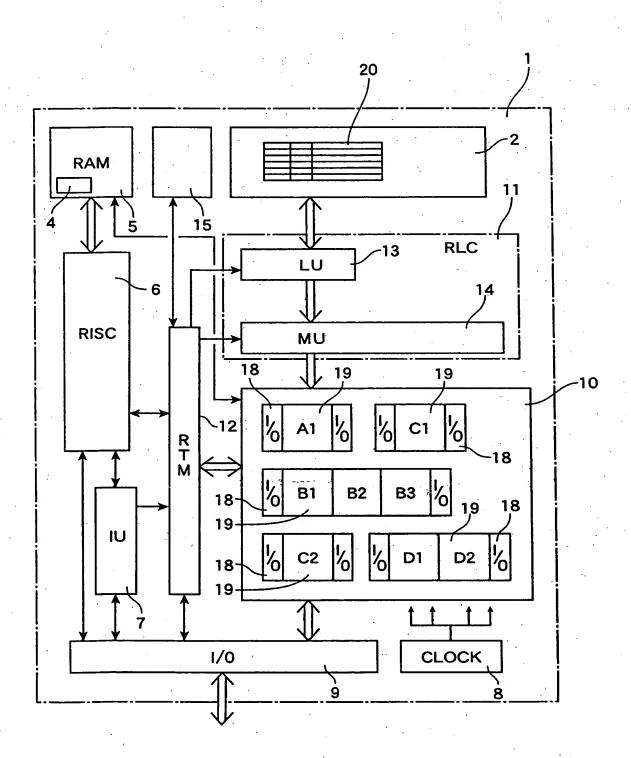
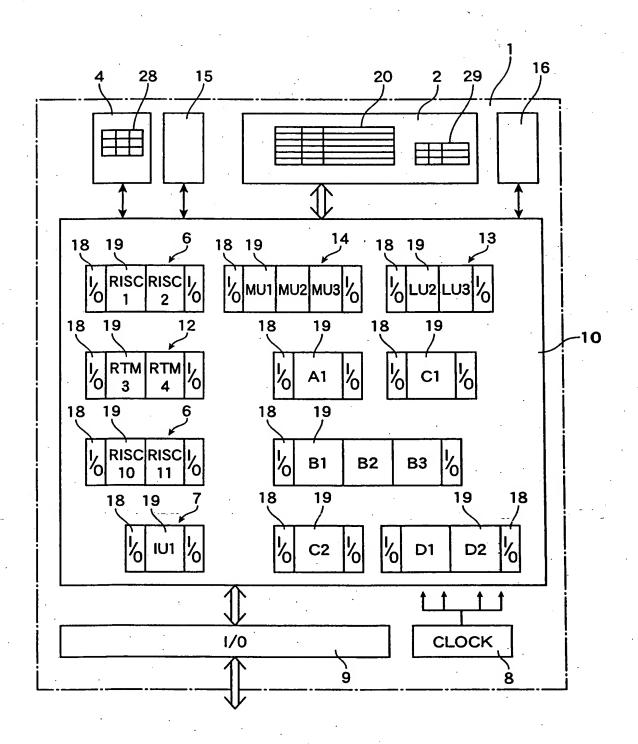
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Fig. 1



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Fig. 2



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Fig. 3

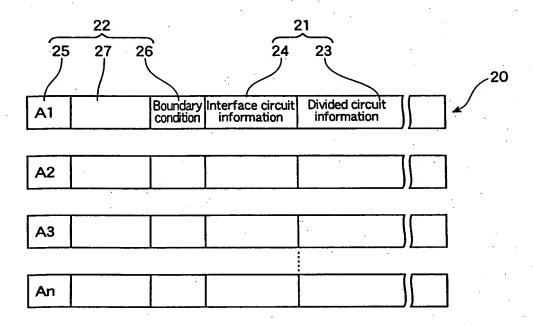
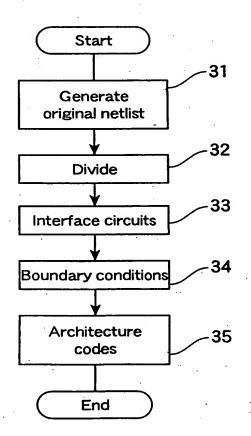


Fig. 6



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Fig. 4

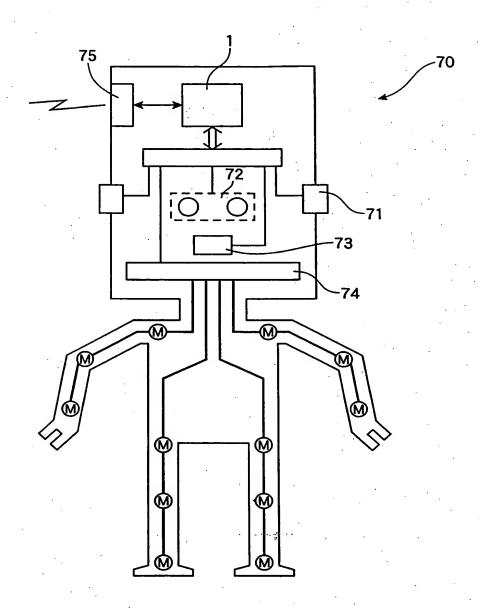
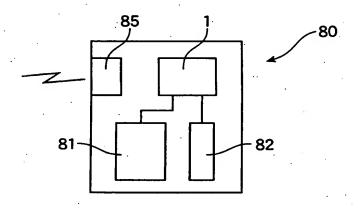
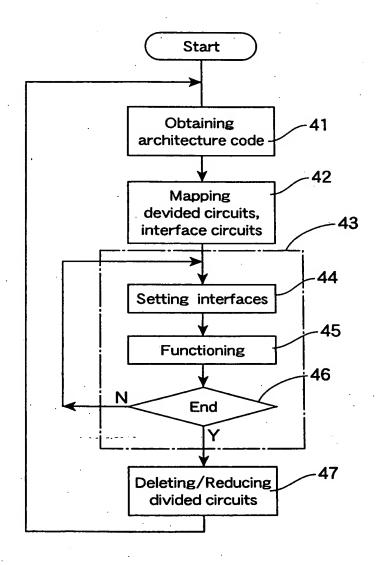


Fig. 5



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Fig. 7



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Fig. 8

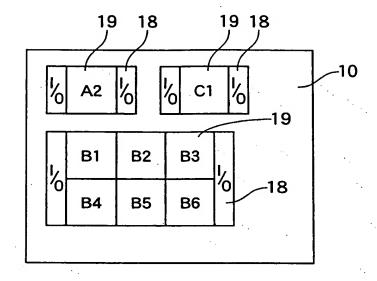
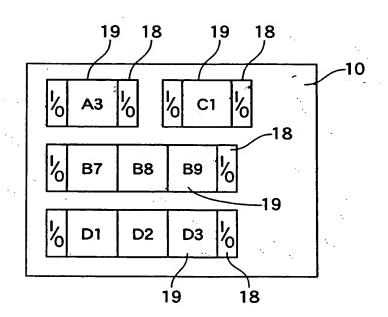


Fig. 9



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Fig. 10

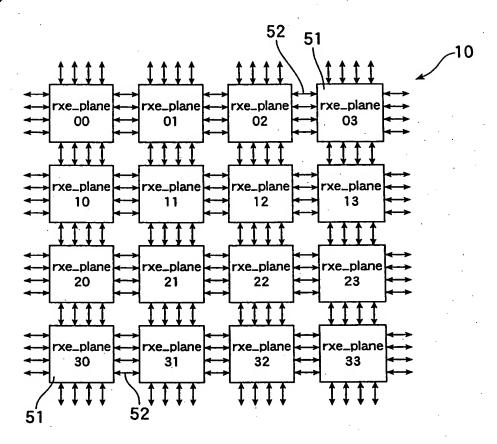
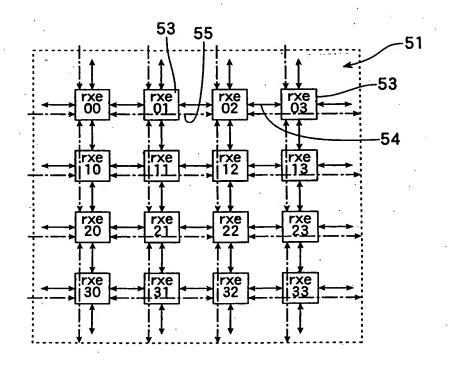
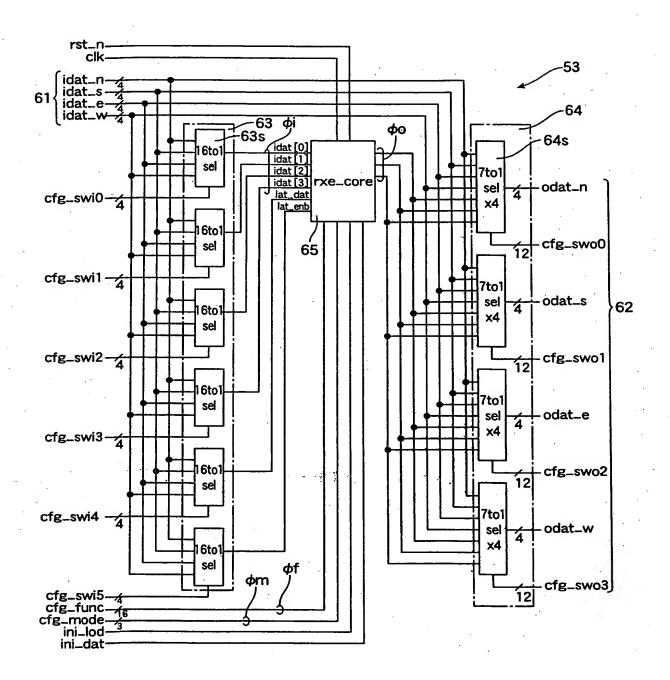


Fig. 11



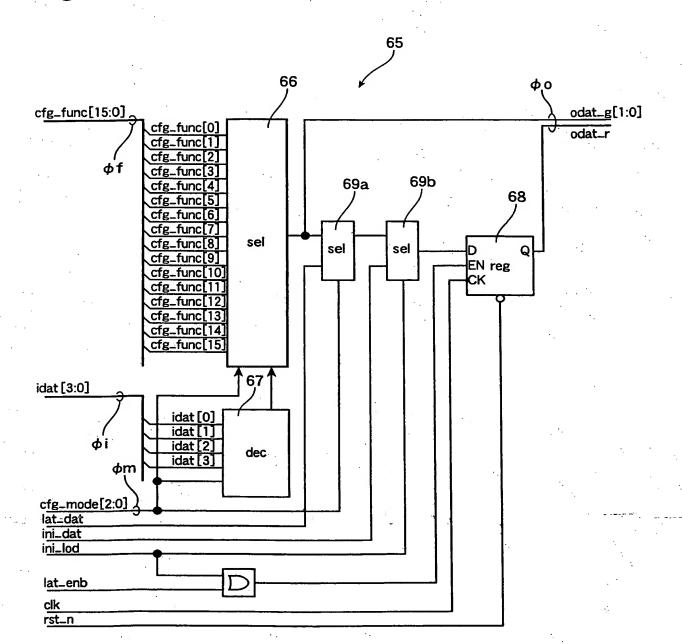
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Fig. 12



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Fig. 13



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Fig. 14

φ	m /	m φi			φο			
cfg-mod	idat		1		odat_g		odat_r ·	comments
[2:0]	[3]	[2]	[1]	[0]	[1]	[0]		· ·
000	0	0	0	0	0	cfg_func [0]	cfg-func [0]	Hold value of
(4in1out)	0	0	0	1	0	cfg_func [1]	cfg-func [1]	odat-g[0]
	0	0	1	0	0	cfg_func [2]	cfg-func [2]	
•	0	0	1	1	0	cfg_func [3]	cfg-func [3]	•
1	0	1	0	0	0	cfg_func [4]	cfg-func [4]	<u> </u>
	0	1	0	1	0	cfg_func [5]	cfg-func [5]	1 . [
[MODE 0]	0	1	1	0	0	cfg_func [6]	cfg-func [6]	<u>l</u>
	0	1	1	1	0	cfg_func [7]	cfg_func [7]	1
	1	0	0	0	0	cfg_func [8]	cfg_func [8]	1 . 1
1	1	0	0	1	0	cfg_func [9]	cfg_func [9]	
1	1	0	1	0	0	cfg_func [10]	cfg_func [10]]
	1	0	1	1	0	cfg_func [11]	cfg_func [11]] [
	1	1	0	0	0	cfg_func [12]	cfg_func [12]] j
	1	1	0	1	0	cfg_func [13]	cfg_func [13]	<u> </u>
j	7	1	1	0	0	cfg_func [14]	cfg_func [14]] .
	1	1	1	1	0	cfg_func [15]	cfg_func [15]	
001	0	0	0	0	0	cfg_func [0]	lat_dat_	Split register
(4in1out)	0	0	0	1	0	cfg_func [1]	lat_dat	
	0	0	1	0	0	cfg_func [2]	lat_dat	
	0	0	1	1	0	cfg_func [3]	lat_dat]
	0	1	0	0	0	cfg_func [4]	lat_dat	
	0	1	0	1_	0	cfg_func [5]	lat_dat	
	0	1	1	0	0	cfg_func [6]	lat_dat]
[MODE 1]	0	1	1	1	0	cfg_func [7]	lat_dat	
	1	0	0	0	0	cfg_func [8]	lat_dat]
	1	0	0	1	0	cfg_func [9]	lat_dat	·
1	1	0	1	0	0	cfg_func [10]	lat_dat] '
	1	0	1	1	0	cfg_func [11]	lat_dat	<u></u>
i .	i	1	0	0 -	0	cfg_func [12]	lat_dat	<u> </u>
	1	1	0	1	0	cfg_func [13]	lat_dat	
	1	1.	1	0	0	cfg_func [14]	lat_dat	
	1	1	1	1	0	cfg_func [15]	lat_dat_	<u></u>

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Fig. 15

	idat			<u> </u>	odat a		odat-r	comments
cfg-mod	[3]	[2]	[1]	[0]	odat_g	[0]	· oual-r	Continents
[2:0]	[9]	ן נצו		0	נין		-f- f [0]	11 12 - 12 - 14 4 - 14
010		•	0	1	· ·	cfg_func [0] cfg_func [1]	cfg_func [0] cfg_func [1]	Highest two bits and lowest
(2in1out)			1	0		cfg_func [1]	cfg_func [1]	2 bits form
			 	1		cfg_func [3]	cfg_func [3]	two separate series.
[MODE 2]	0	0	' ' 		cfg_func [8]	Cig_idile [3]	Cig_iunc [3]	Register holds
	0	1	1		cfg_func [9]		,	result for
	ĭ —	Ö	1		cfg_func [10]		ĺ	lowest 2 bits.
	1	i	1		cfg_func [11]			
011			0	0		cfg_func [0]		Highest two
(2in1out)			0	1	j	cfg_func [1]		bits and lowest
(Ziiii Out)			1	0		cfg_func [2]		2 bits form two separate
[MODE 3]			1	1		cfg_func [3]		series.
[[MODE 3]	0	0			cfg_func [8]		cfg_func [8]	Register holds result for
	0	1]		cfg_func [9]		cfg_func [9]	highest 2 bits.
1	1	0			cfg_func [10]		cfg_func [10]	
	1	1		·	cfg_func [11]		cfg_func [11]	
100			<u>o</u>	0		cfg_func [0]	lat_dat	Highest two
(2in1out)			0	1		cfg_func [1]	lat_dat	bits and lowest
	ļ		1	0		cfg_func [2]	lat_dat	two separate
[MODE 4]			1	1	6 (- [0]	cfg_func [3]	lat_dat	series. Split register.
	<u> </u>	0	ł		cfg_func [8]		lat_dat	Split register.
1	0	0	ł		cfg_func [9] cfg_func [10]		lat_dat	1
	 	1	1		cfg_func [11]		lat_dat	•
101	×	0	0	0	cfg_func [8]	cfg_func [0]	cfg_func [0]	MSB unused.
101	^	ŏ	0	1	cfg_func [9]	cfg_func [1]	cfg_func [1]	Hold value of
(3in1out)	l	6	1	Ó	cfg_func [10]	cfg_func [2]	cfg_func [2]	odat-g[0]
[CHODE ET]	ō	i	ī	cfg_func [11]	cfg_func [3]	cfg_func [3]	
[MODE 5]		1 22	0	0	-cfg_func [12]	cfg_func [4]	cfg_func [4]	1
1	1	1	0	1	cfg_func [13]	cfg_func [5]	cfg_func [5]	1
1		1	1	0	cfg_func [14]	cfg_func [6]	cfg_func [6]]
		1	1	1	cfg_func [15]	cfg_func [7]	cfg_func [7]	
110	×	0	0	0	cfg_func [8]	cfg=func [0]	cfg_func [8]	MSB unused.
(3in1out)		0	0	1	cfg_func [9]	cfg_func [1]	cfg_func [9]	Hold value of
	İ	0	1	0	cfg_func [10]	cfg_func [2]	cfg_func [10]	odat-g[1]
[MODE 6]		<u> </u>	1	1	cfg_func [11]	cfg_func [3]	cfg_func [11]	
		1	0	0	cfg_func [12]	cfg_func [4]	cfg_func [12]	4
ł		1	0	1	cfg_func [13]	cfg_func [5]	cfg_func [13]	4
1		1	1	0	cfg_func [14]	cfg_func [6]	cfg_func [14]	┫.
	×	6	6	6	cfg_func [15]	cfg_func [7]	cfg_func [15]	MSB unused.
1111	^	6	6	1	cfg_func [8]	cfg_func [0] cfg_func [1]	lat_dat	Split register
(3in1out)	- 6	0	1	0	cfg_func [10]	cfg_func [2]	lat_dat	Tobiic register
J	l	6	 	1	cfg_func [10]	cfg_func [3]	lat_dat	1
[MODE 7]]	ĭ	6	0	cfg_func [12]	cfg_func [4]	lat_dat	1 .
Į.		1	ő	i	cfg_func [13]	cfg_func [5]	lat_dat	1
1		i	ĭ	Ö	cfg_func [14]	cfg_func [6]	lat_dat	1
		l i	l i	1	cfg_func [15]	cfg_func [7]	lat_dat	7
			<u></u>	• • • • •				

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Fig. 16

Function	cfg-mode [2:0]	cfg-func [15:0]	comments
Inverter	010/011/100	xxxx_xxxx_xxxx_0101	Use lowest bit
2-input AND	010/011/100	xxxx_xxxx_xxxx_1000	Use lowest 2 bits
2-input NAND	010/011/100	xxxx_xxxx_xxxx_0111	Use lowest 2 bits
2-input OR	010/011/100	xxxx_xxxx_xxxx_1110	Use lowest 2 bits
2-input NOR	010/011/100	xxxx_xxxx_xxxx_0001	Use lowest 2 bits
2-input EXOR	010/011/100	xxxx_xxxx_xxxx_0110	Use lowest 2 bits
2-input EXNOR	010/011/100	xxxx_xxxx_1001	Use lowest 2 bits
3-input AND	101/110/111	xxxx_xxxx_1000_0000	Use lowest 3 bits
3-input NAND	101/110/111	xxxx_xxxx_0111_1111	Use lowest 3 bits
3-input OR	101/110/111	xxxx_xxxx_1111_1110	Use lowest 3 bits
3-input NOR	101/110/111	xxxx_xxxx_0000_0001	Use lowest 3 bits
FullAdder	101/110/111	1110_1000_1001_0110	Use lowest 3 bits. Carry in highest output bits. Sum in lowest output bits.
4-input AND	000/001	1000_0000_0000_0000	
4-input NAND	000/001	0111_1111_1111_1111	
4-input OR	000/001	1111_1111_1111_1110	
4-input NOR	000/001	0000_0000_0000_0001	and the same of the same state.
4-input EXOR	000/001	0111_1111_1111_1110	
4-input NOR	000/001	1000_0000_0000_0001	
AND_AND_OR	000/001	1000_1000_1000_1000	
AND_AND_NOR	000/001	0111_0111_0111_0111	
4-input comparator(1111)	000/001	1000_0000_0000_0000	Values to be compared set at 1